



# **STIC Search Report**

## **EIC 3700**

**STIC Database Tracking Number: 148211**

**TO: Linda Sholl  
Location: RND 8a31  
Art Unit: 3700  
Monday, March 21, 2005**

**Case Serial Number: 10/760173**

**From: Terry Solomon  
Location: EIC 3700  
RND 8b31  
Phone: 272-3509**

**terrance.solomon@uspto.gov**

### **Search Notes**

No current or past litigation found involving US pat. 6499305.

Sources:

Lexis/Nexis  
Questel-Orbit

147782 (10) 6499305 December 31, 2002

Time of Request: March 18, 2005 01:33 PM EST

Research Information:

Utility, Design and Plant Patents  
patno=6499305

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

6499305

December 31, 2002

Adaptive control for a refrigeration system using pulse width modulated duty cycle scroll  
compressor

**CERT-CORRECTION:** September 9, 2003 - a Certificate of Correction was issued for this patent (O.G. September 30, 2003)

**APPL-NO:** 147782 (10)

**FILED-DATE:** May 16, 2002

**GRANTED-DATE:** December 31, 2002

**ASSIGNEE-AT-ISSUE:** Copeland Corporation, Sidney, Ohio, 02

**LEGAL-REP:** Harness, Dickey & Pierce, P. L.C.

Selected file: PLUSPAT  
PLUSPAT - (c) Questel-Orbit, All Rights Reserved.  
Comprehensive Worldwide Patents database

**\*\* SS 1: Results 1**  
**PRT SS 1 MAX 1 LEGALALL**

1 / 1 PLUSPAT - @QUESTEL-ORBIT - image

**Patent Number :**

US2002178737 A1 20021205 [US20020178737]

**Patent Number 2 :**

US6499305 B2 20021231 [US6499305]

**Title :**

(A1) Adaptive control for a refrigeration system using pulse width modulated duty cycle scroll compressor

**Patent Assignee :**

(B2) COPELAND CORP (US)

**Patent Assignee :**

Copeland Corporation, Sidney OH [US]

**Patent Assignee 2 :**

(B2) COPELAND CORP (US)

**Inventor(s) :**

(A1) BASS MARK (US); PHAM HUNG M (US); SINGH ABTAR (US); CAILLAT JEAN-LUC M (US)

**Application Nbr :**

US14778202 20020516 [2002US-0147782]

**Filing Details :**

Divsn of US886592 20010621 [2001US-0886592]

Divsn of US524364 20000314 [2000US-0524364]

Divsn of US939779 19970929 [1997US-0939779]

C.I.P. of US486118 19950607 [1995US-0486118]

Division of: US6408635

Division of: US6047557

Continuation-in-part of: US5741120

**Priority Details :**

US14778202 20020516 [2002US-0147782]

US88659201 20010621 [2001US-0886592]

US52436400 20000314 [2000US-0524364]

US93977997 19970929 [1997US-0939779]

US48611895 19950607 [1995US-0486118]

**Intl Patent Class :**

(A1) F25B-041/04 F25B-049/00

**EPO ECLA Class :**

A47F-003/04

F04C-018/02B2

F04C-027/00C

F04C-029/10B2

F04C-029/10C2B

F04C-029/10D

F04C-029/10F

F04C-029/10G

F04C-029/10K

F25B-001/04

F25B-005/02

F25B-041/04B

F25B-049/00F

F25B-049/02B

G05D-001/08B4

G05D-023/19C2

**EPO ICO Class :**

R25B-001/04

**US Patent Class :**

ORIGINAL (O) : 062126000; CROSS-REFERENCE (X) : 062217000

**Document Type :**

Corresponding document

**Citations :**

US4651535; US5035119; US5241833; US5243829

**Publication Stage :**

(A1) Utility Patent Application published on or after January 2, 2001

**Publication Stage 2 :**

(B2) U.S. Patent (with pre-grant pub.) after Jan. 2, 2001

**Abstract :**

A diagnostic system includes a controller adapted for coupling to a compressor or electronic stepper regulator valve. The controller produces a variable duty cycle control signal to adjust the capacity of the compressor or valve position of the electronic stepper regulator valve as a function of demand for cooling. The diagnostic system further includes a diagnostic module coupled to the controller for monitoring and comparing the duty cycle with at least one predetermined fault value indicative of a system fault condition and an alert module responsive to the diagnostic module for issuing an alert signal when the duty cycle bears a predetermined relationship to the fault value.

**Update Code :**

2002-51

1 / 1 LGST - @EPO

**Patent Number :**

US2002178737 A1 20021205 [US20020178737]

US6499305 B2 20021231 [US6499305]

**Application Number :**

US14778202 20020516 [2002US-0147782]

**Action Taken :**

20030909 US/CC-A

CERTIFICATE OF CORRECTION

**Update Code :**

2003-42

1 / 1 CRXX - @CLAIMS/RRX

**Patent Number :**

6,499,305 A 20021231 [US6499305]

**Patent Assignee :**

Copeland Corp

**Actions :**

20030930 CERTIFICATE OF CORRECTION

Session finished: 18 MAR 2005 Time 20:50:36

QUESTEL.ORBIT thanks you. Hope to hear from you again soon.